

10/619,898

=> d his

(FILE 'HOME' ENTERED AT 16:31:17 ON 31 JAN 2008)

FILE 'MEDLINE, CAPLUS, BIOSIS, SCISEARCH, LIFESCI' ENTERED AT 16:31:38 ON 31 JAN 2008

L1 745 S ALPHA-1(6A)CALCIUM(W)CHANNEL  
L2 267520 S (TRANSGEN? OR CHIMERIC) (6A) (ANIMAL OR MAMMAL OR MOUSE OR MICE  
L3 7 S L1 AND L2  
L4 5 DUP REM L3 (2 DUPLICATES REMOVED)

=> d au ti so pi 1-5 l4

L4 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN  
IN Baron, Scott Phillip; Hidayetoglu, Debra Lynn; Johns, Margaret Ann;  
Offord, James David; Su, Ti-zhi  
TI Non-human mammals and animal cells carrying mutations in the  
 $\alpha 2/81$  voltage-sensitive calcium channel genes  
SO PCT Int. Appl., 124 pp.  
CODEN: PIXXD2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004089072	A2	20041021	WO 2004-IB1187	20040405
WO 2004089072	A3	20041216		
WO 2004089072	A8	20050217		
WO 2004089072	A9	20051215		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1615493	A2	20060118	EP 2004-725751	20040405
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
JP 2006524049	T	20061026	JP 2006-506487	20040405
US 2005044581	A1	20050224	US 2004-823447	20040413
US 2005144659	A1	20050630	US 2004-823432	20040413

L4 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN  
IN Baron, Scott Phillip; Hidayetoglu, Debra Lynn; Offord, James David; Su, Ti-zhi  
TI Non-human mammals and animal cells carrying mutations in the  
 $\alpha 2/8$  voltage-sensitive calcium channel genes  
SO PCT Int. Appl., 176 pp.  
CODEN: PIXXD2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004089071	A1	20041021	WO 2004-IB1110	20040412
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,				

TD, TG  
 EP 1615494 A1 20060118 EP 2004-726877 20040412  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR  
 JP 2006522599 T 20061005 JP 2006-506459 20040412  
 US 2005044581 A1 20050224 US 2004-823447 20040413  
 US 2005144659 A1 20050630 US 2004-823432 20040413

L4 ANSWER 3 OF 5 MEDLINE on STN DUPLICATE 1  
 AU Serikov V B; Petrashevskaya N N; Canning A M; Schwartz A  
 TI Reduction of [Ca(2+)](i) restores uncoupled beta-adrenergic signaling in  
 isolated perfused transgenic mouse hearts.  
 SO Circulation research, (2001 Jan 19) Vol. 88, No. 1, pp. 9-11.  
 Journal code: 0047103. E-ISSN: 1524-4571.

L4 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN  
 IN Niitome, Tetsuhiro; Teramoto, Tetsuyuki; Murata, Yoshuki; Tanaka, Isao  
 TI Transgenic BHK cells stably expressing cDNAs for types BI, BII, and BIII  
 calcium channels  
 SO Jpn. Kokai Tokkyo Koho, 6 pp.  
 CODEN: JKXXAF

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08009969	A	19960116	JP 1994-149027	19940630

L4 ANSWER 5 OF 5 SCISEARCH COPYRIGHT (c) 2008 The Thomson Corporation on  
 STN  
 AU YANEY G C (Reprint); WHEELER M B; WEI X Y; PEREZREYES E; BIRNBAUMER L;  
 BOYD A E; MOSS L G  
 TI CLONING OF A NOVEL ALPHA-1-SUBUNIT OF THE  
 VOLTAGE-DEPENDENT CALCIUM-CHANNEL FROM THE BETA-CELL  
 SO MOLECULAR ENDOCRINOLOGY, (DEC 1992) Vol. 6, No. 12, pp. 2143-2152.  
 ISSN: 0888-8809.

=> d ab 4 5 14

L4 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN  
 AB Transgenic animal cells stably expressing subunits .  
 alpha.1, alpha.2, and beta of calcium  
 channels types BI, BII, and BIII , resp., are given. BHK cells  
 were co-transfected with plasmids pK4kBI (encoding .alpha.  
 1 subunit of rabbit calcium channel type BI),  
 pCAA2 (encoding skeletal muscle alpha.2 subunit of rabbit calcium  
 channel), and pCAB2 (encoding skeletal muscle beta.2 subunit of rabbit  
 calcium channel) and the clones expressing type BI calcium channel and the  
 marker dihydrofolate reductase (DHFR) gene were selected. The transformed  
 cells were used for the pharmacol. studies of the effects of calcium  
 antagonists on Ca2+ currents.

L4 ANSWER 5 OF 5 SCISEARCH COPYRIGHT (c) 2008 The Thomson Corporation on  
 STN  
 AB To study the molecular regulation of voltage-dependent Ca 2+ channels  
 (VDCCs) in the beta-cell, we have cloned a cDNA for the alpha1-subunit  
 from a hamster insulin-secreting cell line (HIT-T15). The cDNA (HCa3a)  
 encodes a 1610-amino acid protein with four repeating membrane domains and  
 an overall structure characteristic of other alpha1-subunits. Although  
 the cDNA shows a high degree of sequence homology (97%) with a rat brain  
 alpha1-subunit (RBalpha1), the C-terminal 15 amino acids of HCa3a share no  
 similarity with any cloned alpha1 protein. High stringency Northern blot  
 analysis revealed a single transcript of approximately 8.6 kilobases in  
 HIT cells and hamster pancreas. A similarly sized species was detected in  
 hamster brain, heart, and skeletal muscle. Using polymerase chain  
 reaction and a primer set unique to HCa3a, this alpha1 isoform was found

to be expressed in islet cell lines derived from rat, mouse, and hamster. The HIT cell alpha1-subunit is also expressed in discrete regions of the rat central nervous system, including the cortex, cerebellum, hypothalamus, and brain stem. The expression of two alpha1 isoforms (HCa3a and cardiac) in the HIT cell underscores the possible complexity of VDCCs in the regulation of beta-cell signal transduction. With its widespread tissue distribution, HCa3a does not conform to the current classification system used for L-type VDCCs; this suggests that an alternative system of classification is required.

=>

## Refine Search

### Search Results -

Terms	Documents
L2 and L3	4

**Database:**

US Pre-Grant Publication Full-Text Database  
 US Patents Full-Text Database  
 US OCR Full-Text Database  
 EPO Abstracts Database  
 JPO Abstracts Database  
 Derwent World Patents Index  
 IBM Technical Disclosure Bulletins

**Search:**

**Refine Search**

**Recall Text** 

**Clear**

**Interrupt**

### Search History

**DATE:** Thursday, January 31, 2008    [Purge Queries](#)    [Printable Copy](#)    [Create Case](#)

<u>Set</u> <u>Name</u>	<u>Query</u>	<u>Hit</u> <u>Count</u>	<u>Set</u> <u>Name</u> <small>result set</small>
<i>DB=PGPB, USPT; PLUR=YES; OP=AND</i>			
<u>L4</u>	l2 and L3	4	<u>L4</u>
<u>L3</u>	(transgen\$ or chimeric) near6 (animal or mammal or mouse or mice or rat or sheep or rabbit or pig)	49063	<u>L3</u>
<u>L2</u>	alpha-1 near9 calcium adj channel	35	<u>L2</u>
<u>L1</u>	alpha-1 near6 calcium adj channel	18	<u>L1</u>

END OF SEARCH HISTORY

[Generate Collection](#)[Print](#)**Search Results - Record(s) 1 through 4 of 4 returned.**

- 
- ☐ 1. [20050221311](#). 07 Apr 05. 06 Oct 05. Isolated human transporter proteins nucleic acid molecules encoding human transporter proteins and used thereof. Gan, Weiniu, et al. 435/6; 435/320.1 435/325 435/69.1 530/350 530/388.22 536/23.5 C12Q001/68 C07H021/04 C12N015/09 C07K014/705 C07K016/28.
- 
- ☐ 2. [20040214238](#). 15 Dec 03. 28 Oct 04. Nociceptive neuron specific calcium channel isoform and uses thereof. Lipscombe, Diane, et al. 435/7.2; 435/368 530/350 G01N033/53 G01N033/567 C12N005/08 C07K014/705.
- 
- ☐ 3. [20040091497](#). 10 Nov 03. 13 May 04. Schizophrenia-related voltage-gated ion channel gene and protein. Cohen, Daniel, et al. 424/185.1; 435/320.1 435/325 435/6 435/69.1 530/350 536/23.5 800/8 C12Q001/68 A01K067/00 C07H021/04 A61K039/00 C07K014/705.
- 
- ☐ 4. [7041475](#). 20 Dec 01; 09 May 06. Purified and isolated platelet calcium channel nucleic acids. Malouf; Nadia, et al. 435/69.1; 435/320.1 435/325 530/350 536/23.1 536/23.5. C07H21/04 20060101 C07K14/00 20060101 C12N15/00 20060101 C12N15/12 20060101 C12N15/63 20060101 .
- 

[Generate Collection](#)[Print](#)

Terms	Documents
L2 and L3	4

[Prev Page](#)[Next Page](#)[Go to Doc#](#)